Improving Disease Treatment Methods

Treatment of active TB disease should be viewed as both a personal health measure intended to cure tuberculosis and as a public health measure intended to stop transmission of TB in the community. In Wisconsin, some individuals diagnosed with tuberculosis do not complete adequate treatment for a variety of reasons. Additionally there are other persons who complete tuberculosis treatment but do not have documentation of clinical indicators of cure (e.g. sputum culture conversion, chest radiograph improvement). These individuals may be at risk for TB disease recurrence and may again threaten the public's health.

To Improve Disease Treatment Methods the following goals have been established:

- Active TB cases in Wisconsin will be treated with appropriate and adequate therapy based on the American Thoracic Society (ATS) and CDC guidelines.
- Drug Susceptibility testing will be performed and documented on all initial TB isolates and repeated as clinically indicated.
- For each case of active TB, there will be documented improvement based on clinical, laboratory, and/or radiologic findings and documented adherence to therapy until completion.
- Laboratory results will be reported promptly.

Goal 5: Active TB cases in Wisconsin will be treated with appropriate and adequate therapy based on the ATS and CDC guidelines

OBJECTIVE 1:
At least 90% of all individuals with reported cases of tuberculosis disease will complete an ATS/CDC recommended regimen of TB drug therapy within 12 months.

Action steps:

1. The Wisconsin TB Program will develop guidelines for effective practice related to active TB disease case management. Guidance to LHDs on case management components will include topics such as:
    - obtaining approved medications through the Wisconsin TB Program
    - ensuring adherence to therapy
    - reviewing cases with the Wisconsin TB Program
    - quality assurance protocols for TB cases

    and will be distributed to LHDs by July 2001. Based on this information LHDs will establish standard protocols for effective practice by January 2002.

2. Electronic Teleconferencing Network (ETN) training on these components of the case management guidelines will be held by Fall 2001 for LHDs.

3. The Wisconsin TB Program will provide LHDs with anti-tuberculosis medication for suspected or confirmed cases of active TB disease and infected individuals. This process will:
    - emphasize decentralization and
    - promote the use of strategies to improve adherence.

4. The LHD and the Wisconsin TB Program will review all initial medication requests for active TB treatment and will investigate medical rationale for regimens that do not fit existing protocols.

5. Based on information obtained about a clinician's medical rationale, the Wisconsin TB Program will approve payment and provision of some regimens that follow acceptable deviations from protocol that have been pre-established through consultation with the TB Program medical consultant.

6. The prescribing physician will be referred to the TB Program medical consultant for regimen changes in which the medical rationale does not warrant the deviations from approved treatment regimens. In such situations, the Wisconsin TB Program will not approve payment for or supply the medications until the TB Program medical consultant has approved the regimen.

7. The Wisconsin TB Program will actively promote the use of DOT for all active TB cases (per DOT guidelines).

8. For all patients not on DOT, the LHD and the Wisconsin TB Program will use all means at their disposal to promote adherence and assure appropriate dosing (e.g. pill minders, bubble packaging, fixed-dose combination pills).

9. LHDs and health-care providers will regularly monitor patients for adverse reactions to TB medications according to client conditions and program protocol.

10. The Wisconsin TB Program and the ALA/W will explore various strategies to strengthen physician education about TB.

Goal 6: Drug susceptibility testing will be performed and documented on all initial TB isolates and repeated as clinically indicated

OBJECTIVE 1:
Drug susceptibility testing will be performed and reported on the initial isolates of at least 95% of patients with culture confirmed tuberculosis.

Action steps:
1. LHDs will verify that drug susceptibility testing is initiated immediately after identification of *M. tuberculosis*.

2. By July 2001, the Wisconsin TB Program will establish guidelines for effective practices related to case management, which will include information on the need for susceptibility testing and the frequency by which it should be repeated. Based on this information LHDs will establish standard protocols on this guidance by January 2002.

3. Through the MLN, laboratories will be informed of the statutory requirement to ensure that susceptibility testing is performed.

Goal 7: For each case of active TB there will be documented improvement based on clinical, laboratory, and /or radiologic findings and documented adherence to therapy until complete

OBJECTIVE 1:
Summary data from completed cases will reflect care given and documented according to state and national objectives.

Action steps:
1. The Wisconsin TB Program will develop guidelines for effective practice related to active TB disease case management. Guidance to LHDs on case management components will include topics such as:
    - assessment
    - facilitating medical and radiological exams
    - sputum collection and induction
    - working effectively with the laboratory
    - case reviews with the Wisconsin TB Program for ensuring completion of therapy
    - quality assurance and case monitoring for tuberculosis clients.

    These guidelines will be distributed to LHDs by July 2001. Based on this information LHDs will establish standard protocols for effective practice by January 2002.

2. By 2003 the Wisconsin TB Program, in conjunction with ALA/W will establish a staff-training curriculum to be used by LHDs.

OBJECTIVE 2:
By completion of therapy, 95% of active TB cases with pulmonary involvement will have documented:

- sputum specimen collections to verify culture conversion for patients with initially culture positive sputum,
- CXR improvement and
- interventions and evaluations of treatment adherence emphasizing DOT.

Action steps:

1. The LHD will develop and implement an individualized case management plan with input from the patient and the health care provider. The plan will include at least the following:
    - using outreach staff from the same culture and linguistic background as the patient (as possible),
    - educating patients about their TB care,
    - using incentives and enablers to improve adherence and
    - facilitating access to health and social services.

2. LHDs will assess every patient for DOT and ensure that DOT is implemented per LHD policy and procedure.

3. LHDs will submit required reports to Wisconsin TB Program as outlined in case management guidelines.

4. The TB Program and LHDs will review case management activities of all TB cases. This review will verify that appropriate activities are being conducted and documented by the LHD in the patient's record. During the reviews, the Wisconsin TB Program will prompt LHDs to submit required reports.

5. Specific concerns about the medical management of any TB patient will be brought to the attention of the TB Program's medical consultant. Plans for resolution will be determined on a case by case basis.

OBJECTIVE 3:
By completion of therapy, 95% of active cases of extra pulmonary TB (including disseminated TB with no pulmonary involvement) will have documented:

- clinical improvement (includes surgical removal) and
- treatment adherence through completion of therapy.

Action steps:

1. The LHD will develop and implement an individualized case management plan with input from the patient and the health care provider. The plan will include at least the following:
    - using outreach staff from the same culture and linguistic background as the patient as much as possible,
    - educating patients about their TB care,
    - using incentives and enablers to improve adherence and
    - facilitating access to health and social services.

2. LHDs will assess every patient for DOT and ensure that DOT is implemented per LHD policy and procedure.

3. LHDs will submit to Wisconsin TB Program required reports as outlined in case management guidelines for effective practice.

4. The TB Program and LHDs will review case management activities of all TB cases. This review will verify that appropriate activities are being conducted and documented by the LHD in the patient's record. During the reviews, the Wisconsin TB Program will prompt LHDs to submit required reports.

5. Specific concerns about the medical management of any TB patient will be brought to the attention of the TB Program's medical consultant. Plans for resolution will be determined on a case by case basis.

Goal 8: Ensure timely reporting of laboratory results

OBJECTIVE 1:
For at least 80% of initial diagnostic specimens received by a laboratory for TB diagnosis, the following laboratory turnaround times will be met:

- reporting of acid-fast examinations of specimens within one working day after specimen receipt,
- reporting of *M. tuberculosis* complex within 14 – 21 days from specimen receipt.

Action steps:

1. Information given at MLN meetings will support and encourage adherence to statutory reporting criteria.

2. The WSLH will maintain state-of-the-art mycobacteriology technology to continue offering the best timely, high quality services possible to the citizens of Wisconsin.

3. The WSLH will continue to provide mycobacteriology services to LHDs through fee-exempt means.

4. Through the MLN, the WSLH will develop a repository of TB isolates to validate testing results of drug susceptibility testing statewide by January 1, 2000.

5. The WSLH will continue to monitor the capability of laboratories offering mycobacteriology services (including susceptibility testing) within the State of Wisconsin with a goal of establishing conformity with national mycobacteriology standards.

6. The MLN will inform all laboratories of statutory requirements and provide assistance with internal laboratory quality assurance evaluations.

7. WSLH will prepare a biannual summary of laboratory data to monitor quality assurance evaluation results.

8. The WSLH will continue “marketing” the “state of the art” mycobacteriology services provided by the WSLH to hospitals and practitioners within Wisconsin.